CM 11. (Amended) A method of increasing the antithrombotic activity of mammalian blood relative to the anticoagulant activity comprising administering to a mammal in need of treatment for thrombosis, an oligoheteropolysaccharide comprising depolymerized heparin containing sulfate groups in the quantity and in the positions characteristic of heparin wherein said oligoheteropolysaccharide has the following physico chemical properties:

[(1) said oligoheteropolysaccharide has a ratio of antithrombotic activity, determined by Yin's assay, to anticoagulant activity, determined by Kaolin-Cephalin clotting time test, in vitro of about 2 or greater; and

(2) said oligoheteropolysaccharide has the following physico chemical properties:]

P1 (A) [an] average molecular weight (determined with the Somogy method in comparison with commercial heparin) [of] from [about] 2600 to [about] 5500 daltons [determined by the Somogy method in comparison with commercial heparin];

P1 (B) hexosamines after hydrolysis (reaction with p-dimethyl-amino benzaldehyde) : 28% ± 2% [of about 28 percent]; 35

P1 (C) uronic acids after hydrolysis (reaction with carbazol) : 31% ± 4% [of about 31 percent]; 35

(D) organic [sulfate] $SO_4^=$ after hydrolysis (titration with naphtharsone) : 30% ± 4% [of about 30 percent];

(E) molar ratios of uronic acids/hexosamines/$SO_4^=$ = 1/1/2;

[(E)] (F) specific [rotation in] rotatory power of the aqueous solution ["Alpha 20" of from about +40 degrees to about +50 degrees] $[\alpha]_D^{20}$ = +40° ÷ +50°;

[(F)] (G) electrophoresis on cellulose acetate (pyridine/acetic acid/water [of about] (1:10:299)) [at about] pH 4.5 and development with toluidine blue [resulting in] = a single band with anodic mobility [(U) of about] U = $2.1 \times 10^{-4} cm^2 v^{-1} sec^{-1}$;

[(G) molecular ratios of uronic acid/hexosamines/sulfate of about 1/1/2;]

(H) powder of ivory color, amorphous and slightly [hydroscopic] hygroscopic;

(I) [a pH of 5 percent aqueous solution of the said oligoheteropolysaccharide of about 7] aqueous solution clear or slightly opalescent; and

(J) [a discharge of the color from blue to reddish blue in a metachromatic identification reaction in which 1 ml of a 2 percent solution of the oligoheteropolysaccharide is added to 1 ml of a